

III. REMARKS

In the Office Action mailed on December 20, 2007, the Examiner: (1) objected to the specification on the basis that the title was not clearly indicative of the invention to which the claims are directed; (2) rejected claims 62-80 under 35 U.S.C. § 112 as being indefinite for failing to point out and distinctively claim the subject matter which applicant regards as the invention; (3) rejected claims 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein et al., "Applying Model-Based Techniques to the Development of UIs for Mobile Computers," 2001 (hereinafter "Eisenstein") in view of Puerto et al., "Towards a General Computational Framework for Model-Based Interface Development Systems," 1999 (hereinafter "Puerta"), (4) rejected claims 46-48, 56-58, and 75-77 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerto, and in further view of U.S. Patent No. 6,243,713 to Nelson et al. (hereinafter "Nelson"), (5) rejected claims 50, 60, 70, and 79 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerto, and in further view of "Resource Description Framework (RDF) Model and Syntax," 1997 (hereinafter "RDF1997"), and (6) rejected claims 51, 61, 71, and 80 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerto, and in further view of "Extensible Markup Language (XML) 1.0," 1998 (hereinafter "XML1998").

In response, Applicants have amended the specification to change the title and amended claims 62 and 72. Applicants submit that claims 42-80 are now in condition for allowance.

A. Response to the Objection to the Specification

As noted above, the Examiner objected to the specification on the basis that the title was not clearly indicative of the invention to which the claims are directed. Applicants have changed the title to be "Interactive User Interface Design System Incorporating Domain, User, Task, and Device Modeling." Applicants submit that the title clearly indicates the invention to which the claims are directed. Therefore, Applicants request the objection to the specification be withdrawn.

B. Response to the 35 U.S.C. § 112 Rejection

As noted above, the Examiner rejected claims 62-80 under 35 U.S.C. § 112 as being indefinite for failing to point out and distinctively claim the subject matter which applicant regards as the invention. In particular, the Examiner stated that (i) the limitation "the requirements" of claims 62 and 72 lacked antecedent basis, (ii) the limitation "[a] computer readable medium comprising instructions" of claim 72 is indefinite because computer instructions can only be stored or recorded

on a computer readable medium, and (iii) claims 63-71 depending from claim 62 and claims 73-80 depending from claim 72 suffered the same deficiencies.

Applicants have amended claims 62 and 72 to disclose “a set of requirements.” In addition, Applicants have amended claim 72 to disclose a “computer readable medium storing instructions.” Therefore, Applicants request that the 35 U.S.C. § 112 rejection be withdrawn.

C. Response to the § 103(a) Rejections

1. Claims 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78

As noted above, the Examiner rejected claims 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerta. Applicants respectfully submit that the combination of Eisenstein and Puerta does not disclose or suggest each and every element of claim 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78, and that the subject matter of claims 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78 does not logically follow from the teachings of Eisenstein and Puerta. As an initial matter, Applicants note that the § 103(a) rejection is similar to the § 103(a) rejection in the previous April 19, 2007 Office Action. Therefore, to the extent the current § 103(a) rejection is similar, Applicants incorporate by reference their arguments from Applicants’ response filed on October 19, 2007. Applicants submit that, at the least, Eisenstein and Puerta do not disclose or suggest the features involving selection of the interaction delivery device from a set of interaction delivery devices.

Regarding independent claim 42, the Examiner stated that Eisenstein does not disclose generating a set of presentations comprising an interaction delivery device and a display object, “wherein the interaction delivery device is selected wherein the interaction delivery device is selected from a set of interaction delivery devices in the device model that meets the user requirements defined by the user model and the task requirements defined by the task model, and wherein the display object is selected from the set of display objects in the presentation elements library that meets the task requirements defined by the task model and the application requirements defined by the domain model.” Applicants agree with the Examiner that Eisenstein is deficient in at least this regard. However, the Examiner asserted that Puerta teaches these features. Applicants respectfully submit that Puerta does not teach or suggest selecting an interaction delivery device from a set of interaction delivery devices in a device model.

Generally, interaction delivery devices are devices that can be used to deliver user interfaces to a user. (Specification at page 24, lines 6-9) For example, in the prescription drug store domain described in the Specification, interaction delivery devices may include web browsers, PDAs, telephonic interaction delivery devices, etc. (Specification at page 24, lines 3-6) As set forth in claim 42, device models define the interaction delivery devices that are available to deliver the interaction delivery device.

Puerta simply does not discuss device models, and therefore, does not teach selecting an interaction delivery device from a set of interaction delivery devices *in a device model*. The Examiner asserted that Puerta, in discussing a “task model” and “map[ping] objects to tasks in an interface model,” teaches the limitation of selecting an interaction delivery device from a set of interaction delivery devices in a device model. (Office Action at pages 6-7) The cited passage only deals with task models and the mapping of objects to tasks in an interface model (i.e. a user interface model), and does not teach anything about device models. The remainder of Puerta is equally lacking as the “basic components” of Puerta’s interface model “are the user-task model, the user model, the domain, the presentation model, and the dialog model.” (Puerta at column 3) A presentation model “is a representation of the visual haptic and auditory elements that a user interface offers to its users” and a dialog model “defines the way in which the presentation model interacts with the user.” *Id.* Thus, none of the components of Puerta resemble a device model. Without any discussion of device models, Puerta does not teach selecting an interaction delivery device from a set of interaction delivery devices in a device model.

For the foregoing reasons, Applicants submit that Eisenstein and Puerta do not teach or suggest each and every element of claim 42. For similar reasons, Applicants submit that Eisenstein and Puerta do not teach or suggest the elements of independent claims 52, 62, and 72, each of which involves an interaction delivery device that is “selected from a set of interaction delivery devices in the device model.”

Therefore, Applicants submit that independent claims 42, 52, 62, and 72 are non-obvious and allowable. Dependent claims 43-45, 49, 53-55, 59, 63-65, 69, 73-74, and 78 are non-obvious and allowable for at least the reason that each of these claims depends from an allowable base claim. Accordingly, Applicants request that the § 103 rejections in regard to claims 42-45, 49, 52-55, 59, 62-65, 69, 72-74, and 78 be withdrawn.

2. Claims 46-48, 56-58, and 75-77

As noted above, the Examiner rejected claims 46-48, 56-58, and 75-77 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerta, and in further view Nelson. Nelson teaches a “system, method and software product” providing for “true multimedia document retrieval by receiving multimedia queries containing various types of data.” (Abstract) Nelson does not teach or suggest selecting an interaction delivery device from a set of interaction delivery devices in a device model. Thus, Nelson does not teach the deficiencies of Eisenstein and Puerta.

Applicants therefore submit that dependent claims 46-48, 56-58, and 75-77 are non-obvious and allowable for at least the reason that each of these claims depends from an allowable base claim. Accordingly, Applicants request that the § 103 rejections in regard to claims 46-48, 56-58, and 75-77 be withdrawn.

3. Claims 50, 60, 70, and 79

As noted above, the Examiner rejected claims 50, 60, 70, and 79 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerta, and in further view of RDF1997. RDF1997 “introduces a model for representing RDF metadata and one syntax for expressing and transporting this metadata in a manner that maximizes the interoperability of independently developed web servers and clients.” (page 2) RDF1997 does not teach or suggest selecting an interaction delivery device from a set of interaction delivery devices in a device model. Thus, RDF1997 does not teach the deficiencies of Eisenstein and Puerta.

Applicants therefore submit that dependent claims 50, 60, 70, and 79 are non-obvious and allowable for at least the reason that each of these claims depends from an allowable base claim. Accordingly, Applicants request that the § 103 rejections in regard to claims 50, 60, 70, and 79 be withdrawn.

4. Claims 51, 61, 71, and 80

As noted above, the Examiner rejected claims 51, 61, 71, and 80 under 35 U.S.C. § 103(a) as being unpatentable over Eisenstein in view of Puerta, and in further view of XML1998. XML1998 is a standards document for XML, which “describes a class of data objects called XML documents and partially describes the behavior of computer programs which process them.” (page 3) XML1998 does not teach or suggest selecting an interaction delivery device from a set of interaction delivery devices in a device model. Thus, XML1998 does not teach the deficiencies of Eisenstein and Puerta.

Applicants therefore submit that dependent claims 51, 61, 71, and 80 are non-obvious and allowable for at least the reason that each of these claims depends from an allowable base claim. Accordingly, Applicants request that the § 103 rejections in regard to claims 51, 61, 71, and 80 be withdrawn.

IV. CONCLUSION

Applicants submit that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at (312) 913-2104.

Respectfully submitted,

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